

**Meeting Minutes**  
**Lower Passaic River Study Area Interim Remedy Feasibility Study**  
**Meeting #8**  
**December 19, 2018**

**Location:** EPA Region 2 in Edison, New Jersey

**Participants:** See attached attendance list

**Agenda:**

- Prior meeting minutes
- FS Work Plan Addendum
- Effect of recontamination
- The application of numerical modeling in the interim remedy FS
- Using a subsurface RAL factor of 1x and 2x
- Replacement value for remediated areas
- Engineering assumptions

**Prior Meeting Minutes:**

Minutes from the December 13, 2018 meeting were reviewed. DEP requested minor language edits and EPA and CPG agreed; EPA recorded the edits in the minutes file. Also, CPG indicated they have other suggested language changes (related to the overall use of numerical modeling in the FS and the discussion of probabilistic cost modeling in the FS) and they will send the changes in a track changes file to EPA for consideration.

As discussed at the last meeting (Meeting #7), EPA will prepare a living document memorializing the decisions made at the FS meetings. The document will be revised as the meetings progress and decisions are made.

**Draft FS Work Plan Addendum Comments:**

The CPG responses to comments from the EPA and DEP were reviewed. CPG noted DEP's comments are more question-based than directive-based and CPG provided answers to the questions in the RTCs.

EPA showed suggested language from DEP for Section 1.1, last paragraph on CSTAG recommendations from December 19, 2018 email. CPG and EPA agreed with language, and the team agreed, in general, that CSTAG recommendations will be followed to the extent they are appropriate specifically for the LPRSA given that CSTAG does not know everything about the site.

DEP comment Section 1.3 Objectives and Scope – switch “final” with “during” and change to “...adaptive management and memorialized in the final ROD”.

Section 1.2.1 – EPA prefers to take this section out of the FS WP Addendum, as they continue to have concerns about the language in this section. The CSM will be described in the FS and it does not need to be included in the FS WP Addendum. CPG agrees to drop section 1.2.1.

The responses to comments are to be finalized by the CPG. The CPG is targeting to submit the RTCs and revised FS Work Plan Addendum (redline strikeout version and clean version) on or before January 3, 2019.

#### **Effect of recontamination:**

EPA presented results of the analysis of residuals using 3% released with 1% and 3% retained for RM 8.3 to 15. Maps considered for Areas of Remediation: 37 (“base map”), 57 (recover more quickly), and 81 (recover more slowly). CPG agrees the effect of residuals should be acknowledged in the FS but not explicitly incorporated to change the footprint in the FS; CPG agrees that the effect should be incorporated in the remedial design. CPG notes their remedial contractors will be guided to control resuspension through best management practices. DEP agrees that BMPs need to be incorporated, but that BMPs should not be the only mechanism to address uncertainty. DEP wants to think more about addressing this item in the FS or later in the RD. DEP will have a response at the next meeting.

EPA, DEP and CPG had a discussion on reasonable values to consider for percentage released and percentage retained. In summary, DEP offered values from other sediment sites that were higher than the percentages suggested by EPA at the meeting, and CPG suggested the DEP literature numbers were not applicable to values being discussed specifically for the LPR at the meeting (the CPG mentioned that the percentages identified by DEP represent values after excavation, not after the remedy (capping) is completed).

EPA reiterated that the 3% release value is from the Lower 8 FFS and 3% retained was from model simulations of capture efficiency for the Lower 8. EPA noted the issue on an expanding footprint due to percent retained was more of a concern when 10% retained was considered, but with 1% and 3% retained, the issue is not as significant (i.e., generally not more than 2 additional acres of footprint area is predicted when using 3% retained, and this impact is less than the relative difference between CS maps).

CPG noted they would consider the residuals issue through a sensitivity analysis in the FS, and would like the option to reconsider the percentages released and retained in the design when additional information is available. EPA and DEP agreed with this request to consider the residuals issue based on all available information during the design.

#### **The application of numerical modeling in the interim remedy FS:**

EPA, DEP and CPG discussed the utility and uncertainty of the models and using them, or not using them, in the FS. CPG indicated that its position is still as expressed in its August 2018 memorandum on the use of numerical modeling in the FS. EPA and DEP were in favor of using the models and CPG was not in favor of using the models.

After discussion and the CPG caucusing, the CPG proposed they will use the numerical models in the FS but would like to prepare language identifying the application of the models and appropriate “guardrails” to define the manner in which the model results will be incorporated and relied on. EPA and DEP agreed that CPG should prepare this language, which will be reviewed within the team for consensus.

## **RAO 2 - Using a subsurface RAL factor of 1x and 2x:**

CPG has completed some additional work related to RAO 2 and subsurface RALs, but is not ready to discuss this topic yet.

### **Replacement value for remediated areas:**

EPA would like CPG to use a replacement value other than zero for TCDD concentrations in the remediated areas and CPG stated they are not in favor of using a replacement value other than zero.

After some discussion, EPA agreed CPG will do a sensitivity analysis in the FS using some range of non-zero values (e.g., 5 and 10 ppt 2,3,7,8 TCDD) in remediated areas to demonstrate the effect of the values on footprint size compared to the zero-value favored by the CPG. In response to an EPA comment, CPG agreed the sensitivity analysis will include an evaluation of the SWAC versus RAL comparison. DEP wants to think more about this replacement idea and whether it should be addressed now in the FS or later in the RD. DEP will have a response at the next meeting

### **Engineering assumptions:**

EPA noted the assumptions are being reviewed, and nothing looked particularly alarming on a preliminary cursory review. DEP has not yet reviewed the assumptions. EPA and DEP targeting to send comments on the engineering assumptions to CPG by January 3, 2019.

### **Other Items:**

Sharepoint – still being worked on and access for users being set.

Action Items – will be sent out to the team immediately after each FS meeting, in addition to being documented in meeting minutes

### **Agenda next meeting:**

- RAO2
- FS Footprints
  - Advantages and disadvantages of considering algorithmic interpolation (e.g. natural neighbor approach) vs manual interpolation for footprint
  - Addressing RM 10.9 area
- Engineering assumptions
- Revisit the timeline for discussing Current Conditions Sampling program

### **Action Items:**

- CPG to email suggested wording for December 13, 2018 meeting minutes
- EPA to work on developing the “living document” memorializing decisions
- DEP to caucus on the analysis of residuals and the non-zero replacement idea; DEP to have a response by the next meeting

- CPG to prepare a draft language to describe the proposed uses of the model in the FS
- EPA and DEP to provide comments to CPG on the engineering assumptions by the January 3, 2019 meeting
- CPG to send FS work plan draft final version (redline and clean version) and RTCs; CPG aiming to send by January 3, 2019
- EPA to update meeting time for January 3, 2019 meeting (1230pm – 330pm)